

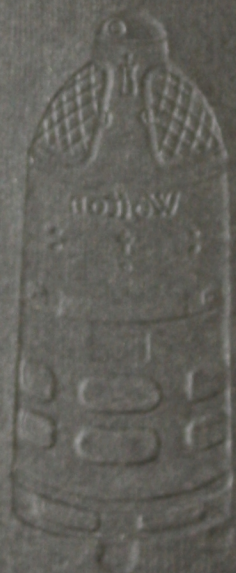
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# Electric Sunlight



Rexolux







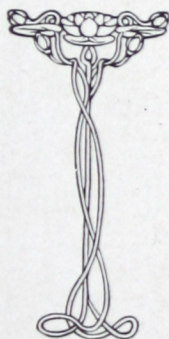
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# *Motor generators*




THE STORY OF THE BUILDING  
OF ANY MASTERPIECE CAN  
NEVER BE FULLY TOLD. IT LIES IN  
THE SPIRIT AND THE IDEALS OF  
HUNDREDS OF MEN. IT EXPRESSES  
ITSELF IN THE FINISHED PRODUCT  
INTO WHICH IS BUILT THE PRIDE  
OF EACH WORKMAN



ELECTRIC PRODUCTS COMPANY  
CLEVELAND, OHIO



## FOREWORD

UNLIGHT is the one big element of success in the making of motion picture films. There are no "ghosts" in sunlight, no flickers, and no variations of light in the field covered by the camera. It is constant, uniform, and direct. Such is the quality of light recorded in the film and the light from the projection arc has not fully performed its part until it has reproduced these same points of perfection.

Only constant, uniform direct current will produce a clear, white light of extreme intensity, the only true definition of "electric sunlight." Alternating current not only pulsates back and forth through the wires but rises and falls in intensity, never uniform even for a fraction of a second. No light produced by such a current can be steady and uniform.

It is in the spot of light in the upper carbon of the arc, called the crater, that good projection originates. This single crater in which is concentrated the spot of electric sunlight can only be had through the use of direct current. Alternating current does not produce this single crater.

The WOTTON REXOLUX is not a converter—It is not a rectifier. It is a vertical Motor-Generator of a distinct and highly superior type. The product of so-called rectifiers and converters is not a uniform but a pulsating direct current. And so many types of so-called direct current are offered for projection that it is to the interest of the exhibitor to understand clearly the relation of uniform direct current as supplied by the WOTTON REXOLUX to perfect projection.

The vertical design, originated by The Electric Products Company, has many advantages. It "spins like a top." Running in trouble-proof, self-aligning ball bearings, automatically lubri-

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cated and readily interchangeable, with the moving parts suspended in line with the axis of the shaft (the direction of its greatest strength), it represents the ideal construction and has reduced operating costs to a point formerly thought impossible. Economy of space, accessibility, and elimination of vibration are among its distinctly valuable features. In many cities, it is the only machine of its kind that will be allowed in the operating room.

The WOTTON REXOLUX delivers to the arc a uniform direct current, separate and distinct from any connection with the variable alternating current. No regulating resistance is required between generator and arc, thus eliminating waste of current and giving a high commercial efficiency. A clear, sharp picture, full of definition and of the correct depth, is the product of the WOTTON REXOLUX.

The secret of WOTTON REXOLUX supremacy lies in its special design for picture projection. By a proper balance of design, by a special system of windings, by the use of interpoles, uniform direct current and perfect projection have been made possible. All types and sizes are built to conform to the standards of the American Institute of Electrical Engineers and have been approved by the National Board of Fire Underwriters.

Operating simplicity is another feature of foremost consideration and as evidence of the unusual attention to and perfection of these details it will be noted, for instance, that in the TWIN REXOLUX the change-over or dissolving of one picture into another is accomplished without the manipulation of even a single switch.

In each type of the WOTTON REXOLUX will be found the same high quality, the same perfection in all details of design and construction. The smallest theatre equipped with the WOTTON REXOLUX is assured a picture equal in quality to that shown in the most elaborate house.

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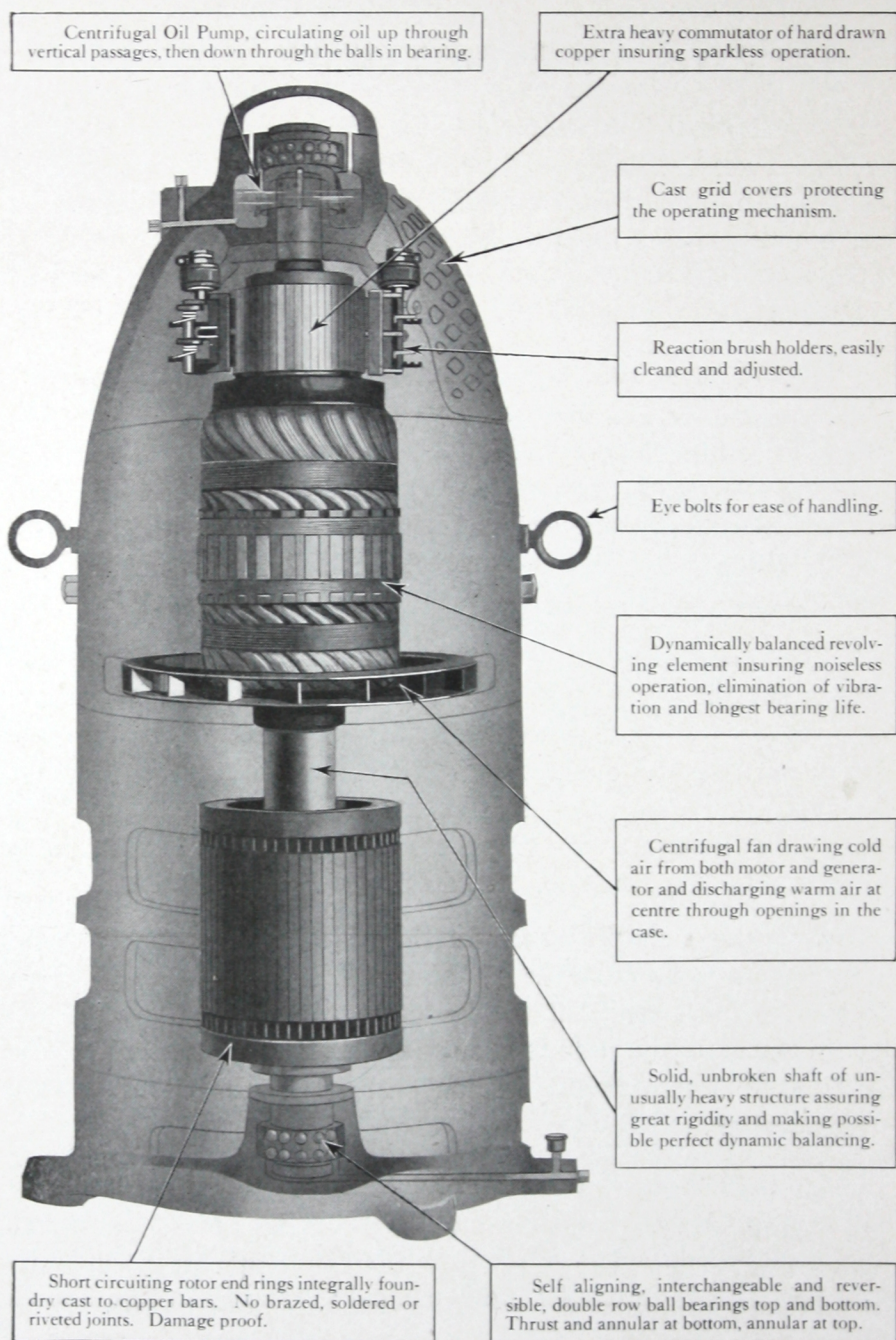


Figure 1. Phantom View of Wotton Vertical Motor-Generator.

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## TWIN REXOLUX

ALL modern ships are equipped with twin screw propellers, all locomotives are built with twin cylinders, and it is this same factor of safety and convenience that has brought about the natural development, in the laboratories of The Electric Products Company, of a direct current machine of the twin type for the theatre.

The name "TWIN REXOLUX" very appropriately applies to this unusual equipment, consisting of two separate WOTTON Vertical Motor-Generators, each in normal service being connected to one projector. Provision is made on the control board for using either Motor-Generator on either projector in case of emergency and for paralleling them for continuous use, giving double capacity on one projector whenever desired.

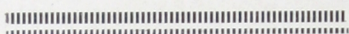
The control board, for single phase, is made up of two units, starting panel and meter panel, both arranged for wall mounting. For two and three phase, two separate starting switches are provided instead of one starting panel. When the Motor-Generators are installed outside of the operating room, the starting panel should be similarly located. At the top is the meter panel, which should always be conveniently located in the operating room. Two combination volt-ammeters are furnished, one for each arc. Each instrument reads normally the amperes consumed by the arc, and by pushing the small spring button on the meter the arc voltage is immediately indicated. Below the meters, on the same panel, are the current regulators, or field rheostats. The handle of the emergency switch is shown in the center of the meter panel.

To those who value and appreciate highest perfection in the projection of motion pictures, the TWIN REXOLUX will make instant appeal as a real necessity. Each projector stands alone, connected to its source of current and is operated entirely inde-

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Wotton

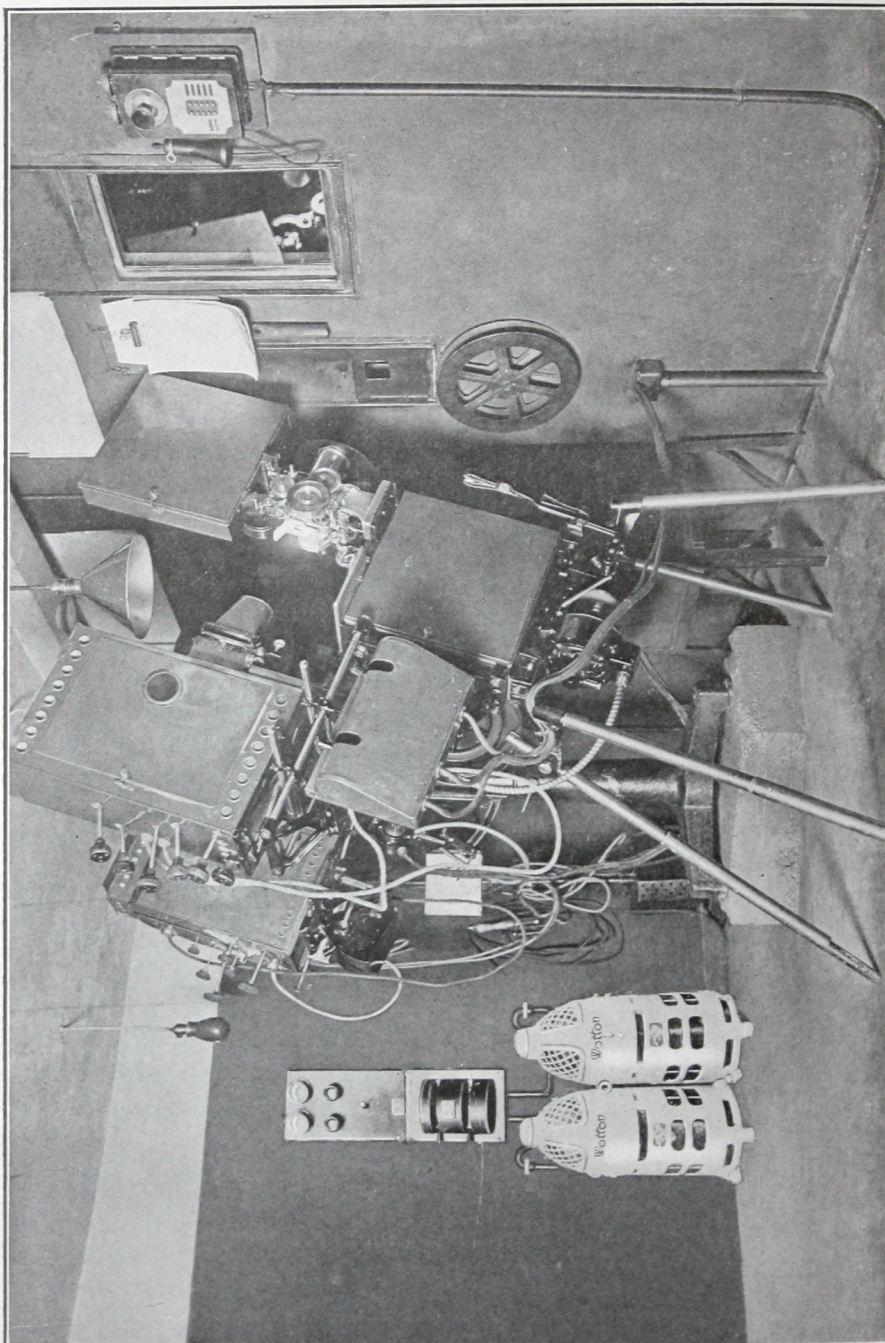
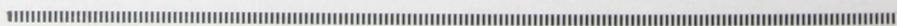


Figure 2. Twin Rexolux.



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pendently of the other, even during the change-over. It is the only way in which an absolutely faultless dissolving effect can be had on every occasion. With the TWIN REXOLUX, the second picture appears on the screen instantly, the light properly adjusted to the density of the new film, and of the desired color and depth.

For emergency service, the TWIN REXOLUX offers every possible safety and convenience. One of the Motor-Generators will supply current to both projectors through the simple closing of the emergency switch on the meter panel. Further, a very satisfactory change-over is made in emergencies, since the striking of the second arc will steal from the first and the first picture fade away as the second one appears on the screen.

It is often necessary to have available more than the normal capacity for showing the dense sections of films and this extra capacity is always necessary in showing tinted films. The TWIN REXOLUX will deliver to one arc the combined capacity of the two Motor-Generators, and this surplus power is available upon the closing of the emergency switch on the meter panel and without previous preparation of any sort. If you want spot light effects, stereopticons, or other special features, the TWIN REXOLUX will also meet these requirements with its uniform direct current.

Highest operating economy is secured in the TWIN REXOLUX through the elimination of all change-over resistance losses and all double voltage generator windings. By a novel arrangement, the idle Motor-Generator consumes no more current than the burning of an incandescent lamp.

Perfect in normal operation, thoroughly dependable in emergencies, unusual when the unusual is required, the TWIN REXOLUX stands alone as the ultimate type of direct current machine for the progressive theatre.

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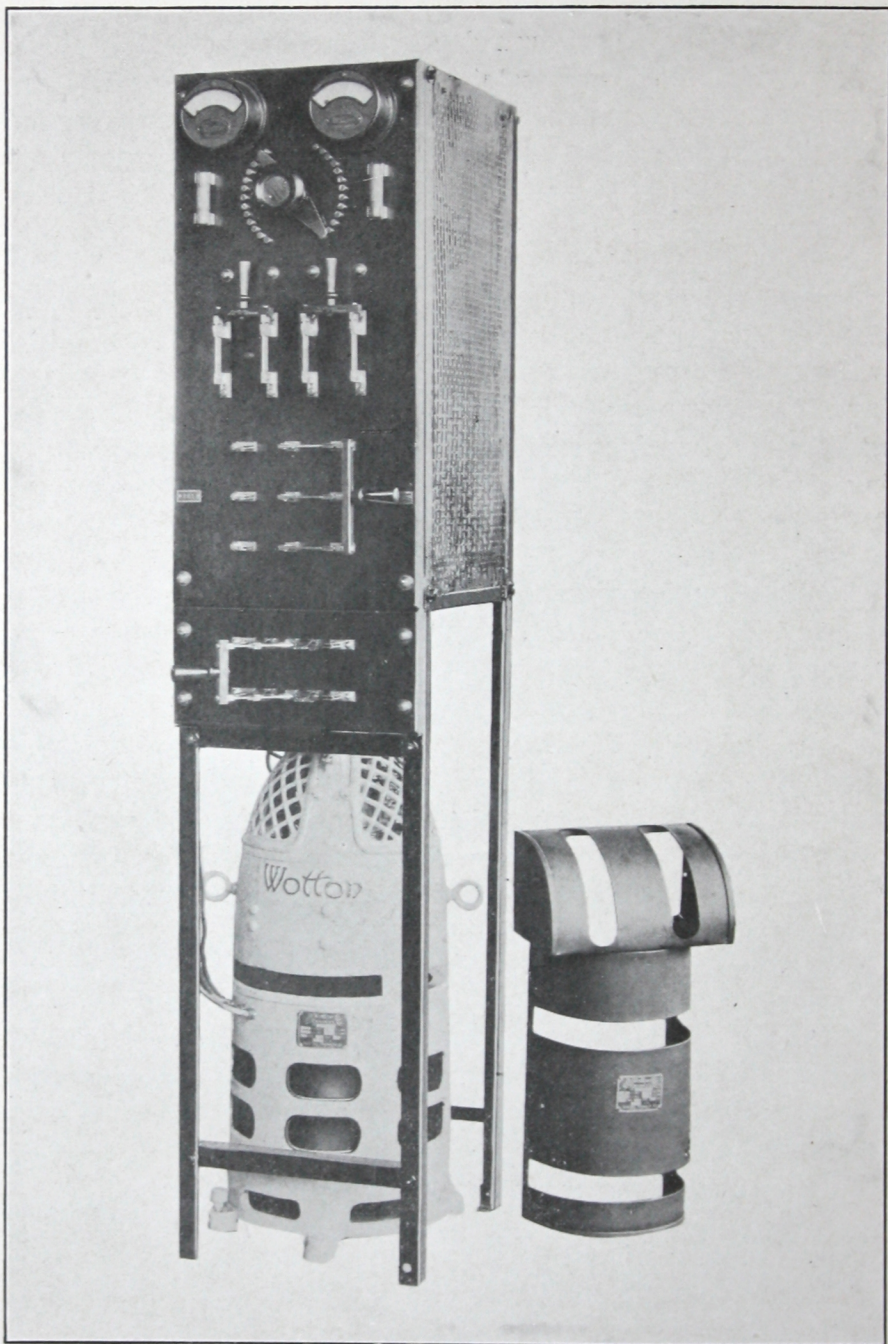


Figure 3. Dissolving Rexolux.

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## DISSOLVING REXOLUX

THE DISSOLVING REXOLUX is a single unit, double-purpose machine. It is a most satisfactory solution of the problem which confronts many exhibitors who desire a highly efficient one arc machine, which will at the same time give a high efficiency and pleasing results during the change-over.

It consists of a single vertical Motor-Generator, with control switchboard. The generator embodies two separate winding systems, one for use on a single arc and both for use while the change-over is being made. The operation of both the single and double arc is controlled from the switchboard. On this self-supporting switchboard are mounted the Motor-Generator starting switch, the regulator which controls the intensity of illumination on the screen, voltmeter and ammeter, the graduating switch for the dissolving effect, the dissolving resistors, and the switch for cutting in either or both windings. This complete control, in combination with the unusual qualities of the double wound Motor-Generator, gives an unexcelled system of operation.

In operating one arc, when only a portion of the generator windings are in use, every unnecessary current loss is eliminated. This double system of winding, with its resulting convenience and economy in operation, gives the DISSOLVING REXOLUX first place as a double-purpose machine. In operating two arcs, the DISSOLVING REXOLUX brings into use both systems of winding and nearly doubles the volume of light delivered to the two arcs without materially increasing the current consumption per candle power.

At the instant of dissolving, the operating switchboard plays an important part. The regulating device is so arranged that the warming up of the cold carbons can be set to different current values, as required by the condition of the carbons.

The DISSOLVING REXOLUX is built to meet the exacting requirements of the careful exhibitor and it is offered with every assurance that, excepting only the TWIN REXOLUX, it has no peer.

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Wotton

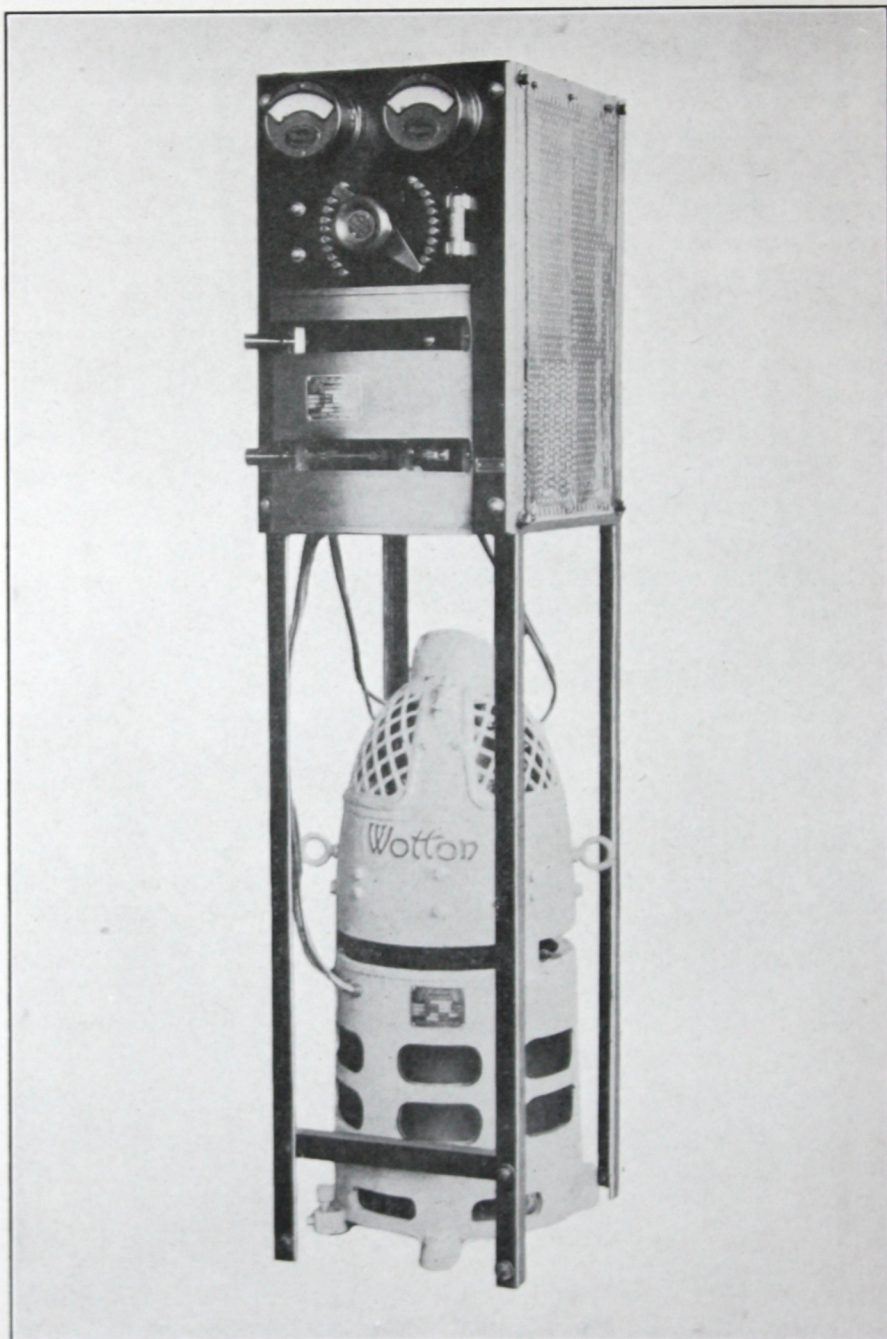
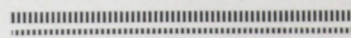
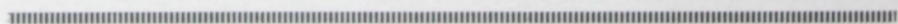


Figure 4. Single Arc Rexolux.



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## SINGLE ARC REXOLUX

**T**HE SINGLE ARC REXOLUX was the first modern direct current machine adopted by the motion picture industry. The advances made in this field in later years may be directly traced to the influences of this masterpiece, the SINGLE ARC REXOLUX.

The vertical system of suspension, in combination with a system of dynamic balancing of the revolving elements, here first applied to the motion picture machine, has eliminated vibration. Ball bearings, readily interchangeable and self-aligning, have eliminated friction losses and lowered operating cost.

The switchboard for controlling both the arc and the Motor-Generator is self-supporting, and mounts starting switch, regulator, voltmeter and ammeter. The mounting of all control devices on one panel effects a considerable saving in installation cost and makes the machine easily movable.

The SINGLE ARC REXOLUX is ideal for one arc operation and is in reality a DISSOLVING REXOLUX where the conditions are not too exacting. In fading one picture into another, the striking of the second carbons steals the arc from the first. The incandescent tips of the first set die away, the picture vanishing as the second one appears. This change-over is so thoroughly pleasing that it has become standard practice in many operating rooms.

The peculiarly intense and evenly diffused "electric sunlight," the product of the SINGLE ARC REXOLUX, gives realism to any good picture, a realism which in turn brings most interesting profits to the user. So astonishing has been the improvement in projection upon installation of this machine that one customer jokingly remarked "I am afraid to turn on more than one-half the strength of the REXOLUX for fear it will throw a picture through the back of the house and collect a crowd on the other street."

Where conditions do not justify a greater investment or where the needs of the theatre are fully met in the SINGLE ARC REXOLUX, it will be found an ideal equipment. It is every inch a masterpiece.

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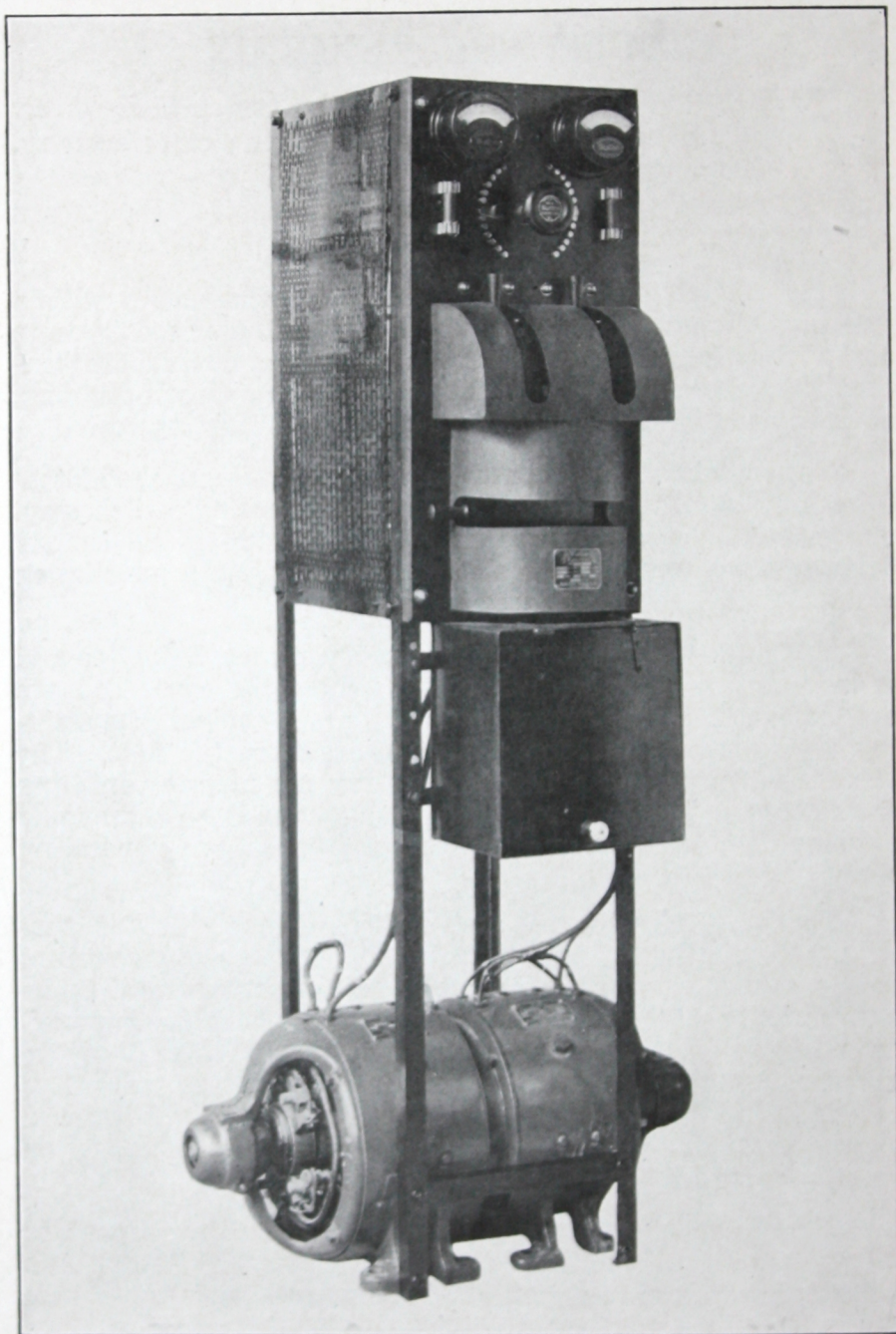


Figure 5. DC to DC Rezolux.

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## DC TO DC REXOLUX

**D**IRECT current is absolutely necessary to good projection, but the special pressure necessary to operate a projection arc economically is not furnished direct from the lines of the electric power companies. Under such conditions, over fifty percent of the power purchased goes to waste in heat.

The DC to DC REXOLUX effects a most interesting saving in current consumption and in the use of carbons. The operating room is cooler, the operator better able to work in comfort, and the projection arc operates under conditions which make it possible to secure the artistic detail of the films, which increases your patronage and profits.

The DC to DC REXOLUX will save in current consumed by the arc—

- 25% of current purchased at 110 volts line pressure
- 60% of current purchased at 220 volts line pressure
- 85% of current purchased at 550 volts line pressure

The DC to DC REXOLUX consists of a horizontal Motor-Generator—in order that each of the commutators may be equally accessible. The control panel is similar to the panels used with the alternating current types. The Motor-Generator is close-coupled, easily accessible, and occupies but little floor space.

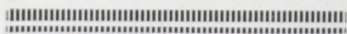
Wherever direct current is furnished by the power companies, variations in the flow must be expected, due to the demands of thousands of central station customers. At certain hours, these variations are intensified through unusually heavy factory and elevator loads. Each projection screen on such a line reflects the changes instantly, each pair of viewing eyes tires in adjusting to the changing light.

The DC to DC REXOLUX is built along the same perfect lines as the Alternating Current REXOLUX. It furnishes a uniform direct current of constant intensity and of the right pressure to produce sunlit pictures. By interposing such a machine between the arc and the direct current power line, the variations of power service are cushioned and dissipated before reaching the arc.

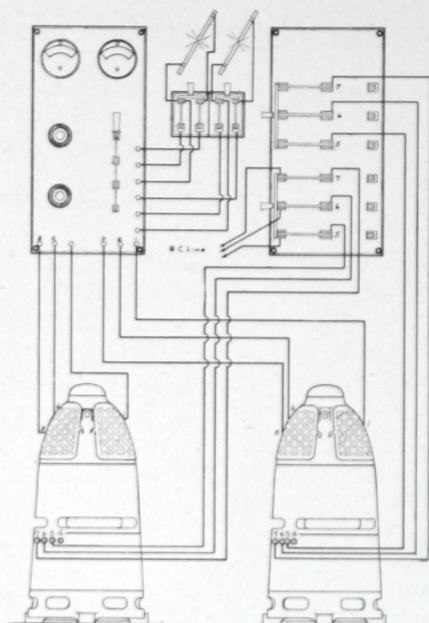
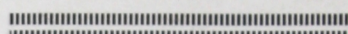
The same design and high standard of construction that produces good projection in the vertical types, is built into the DC to DC REXOLUX. It is built in Twin, Dissolving, and Single Arc types, as listed on page 15.

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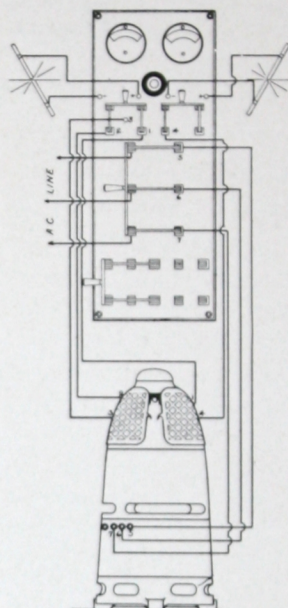




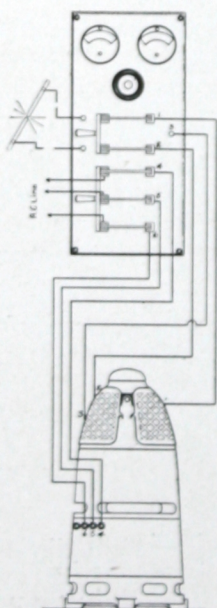
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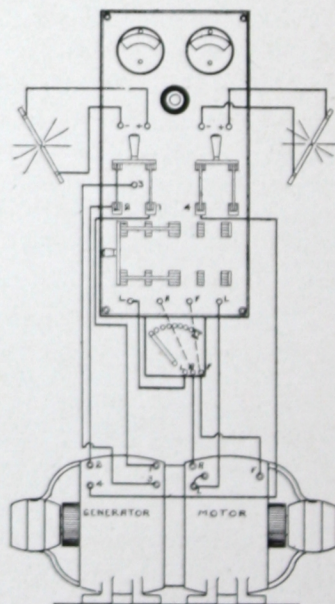
Wiring Diagram, Twin Rexolux



Wiring Diagram, Dissolving Rexolux



Wiring Diagram, Single Arc Rexolux



Wiring Diagram, DC to DC Rexolux

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## Prices, Weights, Capacities, Types, Etc.

### Alternating Current Rexolux

Type	Amp.	Phase	Shipping Weight	Width	Depth	Height	List Price
TWIN							
Twin-200	200	2 and 3	1550 lbs.	30"	15"	32"	\$1,200.00
Twin-120	120	1, 2, 3	1300 lbs.	30"	15"	32"	1,050.00
Twin-80	80	1, 2, 3	1200 lbs.	30"	15"	32"	850.00
DISSOLVING							
MMA-50	50	1, 2, 3	900 lbs.	15"	18"	71"	780.00
SINGLE ARC							
MA -80	80	2 and 3	980 lbs.	15"	18"	63"	750.00
MA -50	50	1, 2, 3	850 lbs.	15"	18"	63"	650.00
MA -35	35	1, 2, 3	800 lbs.	15"	18"	63"	550.00

### DC to DC Rexolux

Twin-200D	200	1800 lbs.	42"	20"	24"	\$2,100.00
Twin-100D	100	1250 lbs.	34"	18"	20"	1,200.00
MMA-50D	50	770 lbs.	34"	18"	63"	800.00
MA -50D	50	750 lbs.	34"	18"	63"	700.00

Direct Current voltage on all types is variable from 40 to 60 volts when carrying an arc.

Ampere capacities on all Twin types are total combined capacities for intermittent ratings, twenty minutes fully loaded and twenty minutes idle.

For omission of meters on any type, deduct \$50 list.

Above list prices are for sixty cycle current only. For fifty cycles, add ten percent. For twenty-five to forty cycles, add fifteen percent.

### DISCOUNTS UPON APPLICATION

#### Amperes Required

Width of Picture	D. C. Amperes
9 to 13 feet	35 to 40
14 to 18 feet	50 to 60
18 to 24 feet	80 to 100

For dark films, for unusual auditorium lighting, for high light absorbing screens, or for an unusually long throw, these ampere values should be increased from 25 to 50%. For tinted films, they should be increased 50 to 100%.

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## GUARANTEE

**A**LL WOTTON REXOLUX machines are guaranteed by the manufacturer to be free from defects of material or workmanship for one year following date of shipment; any parts developing such defects will be replaced free of charge, f.o.b. factory, at any time within that period. Carbon brushes, subject to wear within the above period, not included in this guarantee.

Dealers are solely responsible to the purchaser of our goods for all undertakings and guarantees made by them beyond those expressed above.

**Electric Products Company**

CLEVELAND, OHIO

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